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EXAMINER	
NICKERSON, JEFFREY L	

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2142	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/816,217	MILLINGTON, NICHOLAS A. J.	
	Examiner	Art Unit	
	JEFFREY NICKERSON	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *See Continuation Sheet* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6, 9-10, 19-20, 31, 33, 65-66, 86, 91, 109-114, 117-118, 121, 127-128, 138-139, 141, 156, 201-202, 206, 218-219, 221, 229, 233, 244, 549-557, 562-568, 573-576* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims pending in the application are 1-6,9,10,19,20,31,33,65,66,86,91,109-114,117,118,121,127,128,138,139,141,156,201,202,206,218,219,221,229,233,244,549-557,562-568 and 573-576.

DETAILED ACTION

1. This communication is in response to Application No. 10/816,217 filed on 01 April 2004. The amendment presented on 22 April 2008, which cancels claims 558-561 and 569-572, and provides change to the specification and claims 86, 91, 109, 139, 218, 229, 556-557, and 562-563, is hereby acknowledged. Claims 1-6, 9-10, 19-20, 31, 33, 65-66, 86, 91, 109-114, 117-118, 121, 127-128, 138-139, 141, 156, 201-202, 206, 218-219, 221, 229, 233, 244, 549-557, 562-568, 573-576 have been examined. The application remains under accelerated examination as per MPEP 708.02 VIII.

Examiner Note: Claim 533 was missing from the grounds of rejection on the Office Action dated 18 January 2008 (pg 13, #16) as being anticipated by Jo. However, it was rejected in the body of the claim rejections (pgs 18-19). This was merely a typo, due in part to the sheer amount of claims and scattered numbering.

Response to Amendment

2. The amendment presented on 22 April 2008 which provides change to the specification and cancellation of claims removes the subject matter that was previously deemed as "new matter". Therefore, the objection under 35 USC 132(a) is hereby withdrawn.

Specification

3. The amendment presented on 22 April 2008 which provides change to the abstract and specification is noted. All prior objections to the specification are hereby withdrawn.

Claim Objections

4. The amendment presented on 22 April 2008 providing changes to the claims is noted. All prior objections to the claims are hereby withdrawn.

Claim Rejections - 35 USC § 112

5. The amendment presented on 22 April 2008 cancelling claims 559-561 and 569-571 is noted. All prior rejections under 35 USC 112, first paragraph, are therefore obviated and hereby withdrawn.

6. The amendment presented on 22 April 2008 providing change to claims 109 and 562-563 is noted. The prior rejection under 35 USC 112, second paragraph, with respect to claim 109 is hereby withdrawn.

The rejections under 35 USC 112, second paragraph, with respect to claims 562 and 563 are hereby maintained. The applicant has changed "appreciable delay" to "delay perceivable by the user". Different users would have different levels of perception and this therefore creates a relative limitation, as the applicant never defines what is and is not considered "perceivable". There is no provision in the

claim language (or disclosure) for the system having an AI that can learn what delay would be perceivable by each listener. Nor does the applicant disclose a "playback factor", a measurement defining what would be unperceivable to an average user in terms of frames and seconds and percent variation, as Jo does in section 2.2.

Claim Rejections - 35 USC § 101

The amendment presented on 22 April 2008 providing change to claim 218 is noted. All prior rejections under 35 USC 101 are hereby withdrawn.

Response to Arguments

7. Applicant's arguments filed 22 April 2008 have been fully considered but they are not persuasive.

Applicant argues several limitations are not taught by Jo ("Synchronized one-to-many media streaming with adaptive playout control", 10 December 2002) and therefore alleges that claims 1-4, 31, 65-66, 91, 109-112, 118, 121, 139, 156, 201-202, 206, 218-219, 221, 244, 553, 557, 562-563, 565-568, 570-571, 575, and 576 are not anticipated by Jo.

Independent claims 1, 109, and 218

First limitation argued: "the task source device being configured to distribute a series of tasks to the synchrony group." The examiner respectfully disagrees

with applicant's interpretation of Jo's teachings. The applicant is correct in asserting that the client's are adaptively playing back the tasks. These tasks, however, are streamed from a server (Jo: title, abstract, and introduction).

Second limitation argued: "each task being associated with a time stamp indicating a time, relative to a clock maintained by the task source device, at which the devices comprising the synchrony group are to execute the respective task." Applicant argues that MPEG-2 Presentation Time Stamps (PTS) do not indicate a task is associated with the time stamp. The examiner respectfully disagrees with applicant's interpretation of Jo's teachings. Each PTS in an MPEG-2 stream is associated with a frame. The examiner has included an evidentiary document to indicate inherent features of the MPEG-2 system (MPEG-2 Systems FAQ: question 17 and answer).

Third limitation argued: "a time stamp indicating a time ... at which the devices ... are to execute the respective task." Applicant argues that the PTS does not indicate a time at which a task is to be executed. The examiner respectfully disagrees with applicant's interpretation of Jo's teachings. Each PTS in an MPEG-2 stream is associated with a frame and indicates the time at which it should be presented. The examiner has included an evidentiary document to indicate inherent features of the MPEG-2 system (MPEG-2 Systems FAQ: question 17 and answer).

Therefore, the rejections to these claims are maintained.

Independent claims 65, 201, and 557

First limitation argued: "an interface module configured to receive a series of tasks." Applicant argues that the receiver buffer merely stacks multiplexed streams while awaiting playback and does not actually receive the streams/tasks. The examiner respectfully disagrees with applicant's interpretation of Jo's teachings. Jo teaches streaming audio/video data from a server to the clients over an IP network (Jo: Figure 1). The clients must inherently have some type of network interface to be able to communicate on the IP network. Once received, the streamed media is placed into the receiver's buffer(s).

Therefore, the rejections to these claims are maintained.

Independent claim 576

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. definition of a zone player) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Therefore, the rejection to this claim is maintained.

Remaining dependent claims

Applicant argues the remaining dependent claims conditionally on the arguments for the independents above. Since applicant's arguments are not persuasive, the rejections for these claims are all maintained.

Claim Rejections - 35 USC § 102

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 1-4, 31, 65-66, 91, 109-112, 118, 121, 139, 156, 201-202, 206, 218-219, 221, 244, 553, 557, 562-563, 565-568, 575, and 576 are rejected under 35 U.S.C. 102(a) as being anticipated by Jo et al ("Synchronized one-to-many media streaming with adaptive playout control", 10 December 2002) and evidenced by MPEG-2 Systems FAQ.

Regarding claim 1, Jo teaches a system comprising a plurality of devices, one of the devices operating as a task source device and at least one other device operating as a member of a synchrony group, (Jo: Figure 1 depicts a server distributing media for playback to multiple clients)

the task source device being configured to distribute a series of tasks to the synchrony group, (Jo: Section 2.1 specifies the system is for scheduling

audio/video streams to multiple clients, using, for example, MPEG-2 or MPEG-4) each task being associated with a time stamp indicating a time, relative to a clock maintained by the task source device, at which the devices comprising the synchrony group at to execute the respective task (Jo: Section 2.1 specifies the streams could be MPEG-2; section 2.2 specifies these inherently have a Presentation TimeStamp (PTS) in the header that is associated with a frame and indicates a time of execution).

Regarding claim 2, Jo teaches a system in which the synchrony group comprises a plurality of member devices (Jo: Figure 1 depicts multiple clients).

Regarding claim 3, Jo teaches a system in which each device comprising a member of the synchrony group is further configured to execute each task that it receives from the task source device at the determined time (Jo: Section 2.2 specifies a PTS and executing playback based on the PTS).

Regarding claim 4, Jo teaches a system in which the member devices are configured to execute the respective tasks in synchrony (Jo: Section 2.4 specifies the objective of inter-client synchronization).

Regarding claim 31, Jo teaches a system in which at least one member device is further configured to adjust its clock rate (Jo: abstract specifies the adjustment of the playback rate of the clients).

Regarding claim 65, Jo teaches a device for executing a series of tasks provided by a task source at times specified by the task source in relation to a clock maintained by the task source, (Jo: abstract specifies the playback of media using a target presentation time specified by the server) the device comprising:

an interface module (receiver buffers) configured to receive the series of tasks (Jo: section 2.2 specifies the clients have receiver buffers; See also Figure 1);

a current time retrieval module (scheduler) configured to obtain from the task source a current time value (Jo: section 2.1 specifies the possible use of NTP for employing tightly synced playback, which inherently retrieves current time information);

an execution time determination module (scheduler) configured to determine a time at which the task is to be executed (Jo: section 2.2 specifies the scheduler controls playback so that the presentation time is met; See also Figure 1);

and a task execution module (streaming media applications) configured to execute each respective task (Jo: section 1 specifies streaming media applications are controlling execution at the clients; See also Figure 1).

Regarding claim 66, Jo teaches a device further including a control module (controller) for controlling the execution of commands received by the said interface module (Jo: section 2.2 specifies the controller acting in conjunction with the scheduler to execute the tasks on time; See also Figure 1).

Regarding claim 91, this device claim comprises limitations found within claim 31 and the same rationale of rejection is used, where applicable.

Regarding claim 109, Jo teaches a method of operating a system comprising the steps of:

distributing a series of tasks to a synchrony group, the syncrhony group comprising at least one device (Jo: abstract, introduction, Figure 1);

associating each of the tasks with a time stamp (Jo: section 2.2 specifies using a presentation timestamp), wherein the time stamp indicates a time, relative to a clock maintained by a task source device, at which devices

comprising the synchrony group are to execute the respective tasks (Jo: section 2.2 specifies the server using a presentation timestamp in the headers).

Regarding claim 110, this method claim comprises limitations found within claim 2 and the same rationale of rejection is used, where applicable.

Regarding claim 111, this method claim comprises limitations found within claim 3 and the same rationale of rejection is used, where applicable.

Regarding claim 112, this method claim comprises limitations found within claim 4 and the same rationale of rejection is used, where applicable.

Regarding claim 118, Jo teaches a method in which the task source device is configured to distribute tasks to the member devices using a selected multi-cast transmission methodology. (Jo: abstract)

Regarding claim 121, Jo teaches a method further comprising the step of controlling the series of tasks to be distributed by the task source device. (Jo: section 2.4 specifies the use of client feedback using RTCP signaling to provide some server sided control of distribution)

Regarding claim 139, this method claim comprises limitations found within claim 31 and the same rationale of rejection is used, where applicable.

Regarding claim 156, Jo teaches the method further comprising the step of obtaining information associated with the tasks from a single information source (Jo: Figure 1 depicts the information coming from one server. See also Figure 6, the simulation uses one streaming server).

Regarding claim 201, Jo teaches a method for operating a device comprising the steps of:

obtaining a series of tasks (Jo: section 2.2 specifies the server can obtain the streams from MPEG-2 programs);

determining a time at which each respective task is to be executed (Jo: section 2.2 specifies the PTS exists in the frame, which inherently means the sender put it there);

transmitting the series of tasks from the device to at least one other device (Jo: abstract).

Regarding claim 202, this method claim comprises limitations found within claim 118 and the same rationale of rejection is used, where applicable.

Regarding claim 206, Jo teaches the method wherein in which the series of tasks includes a series of task sequences. (Jo: section 2.2 specifies the streams are multiplexed audio and video which are sequenced with sequence numbers)

Regarding claim 218, this computer readable storage medium claim comprises limitations found within claim 65 and the same rationale of rejection is used, where applicable.

Regarding claim 219, this computer readable storage medium claim comprises limitations found within claim 66 and the same rationale of rejection is used, where applicable.

Regarding claim 221, this computer readable storage medium claim comprises limitation found within claim 206 and the same rationale of rejection is used, where applicable.

Regarding claim 244, this computer readable storage medium claim comprises limitation found within claim 31 and the same rationale of rejection is used, where applicable.

Regarding claim 553, Jo teaches the system wherein the clock rate of the at least one member device is adjusted in relation to a clock rate value maintained by the task source device's clock (Jo: section 2.1, specifies the task source adjusts its

target presentation time and then distributes it, which results in the member devices adjusting their playback rates; See also section 2.2).

Regarding claim 557, Jo teaches a system for synchronizing operations among a plurality of digital data processing devices (Jo: abstract) comprising:

an interface module configured to control one or more synchrony groups (Jo: Figure 1, sever to IP network interface; See also section 1);

at least one task distribution device (server) configured to distribute tasks over a network (Jo: abstract; Figure 1, Server);

at least one member device configured to perform the tasks in synchrony (Jo: abstract; Figure 1, clients).

Regarding claim 562, Jo teaches the system wherein the task distribution device is further configured to enable the at least one member device to initiate a performance of the tasks in synchrony without delay perceivable by a listener (Jo: abstract).

Regarding claim 563, Jo teaches the system wherein the task distribution device is further configured to allow one or more additional member devices to join without delay perceivable by a listener or disengage without delay perceivable by a listener the at least one member device's synchronous performance (Jo: section 2.1 specifies clients can join through the PIM-SM routing).

Regarding claim 565, Jo teaches the system wherein the at least one distribution device is independently clocked (Jo: section 2.4, specifies the use of server aided playback adjustment; section 2.4, description of figure 5 specifies using the server time information to guide the local client time information).

Regarding claim 566, Jo teaches the system wherein the at least one member device is independently clocked (Jo: section 2.3 specifies the client can perform local playback adjustment without timing information from the server).

Regarding claim 567, Jo teaches wherein each of the tasks is associated with a time stamp relative to a clock maintained by the at least one task distribution device (Jo: section 2.2 specifies the use of a timestamp).

Regarding claim 568, Jo teaches wherein the tasks comprise audio tracks (Jo: abstract specifies audio).

Regarding claim 575, Jo teaches wherein the time stamp represents when the at least one member device is to execute the task (Jo: section 2.2 specifies the PTS is for presentation execution time).

Regarding claim 576, Jo teaches a system for synchronizing the operations among a plurality of digital data processing devices comprising a zone player

(controller) residing within one or more audio reproduction devices (clients) (Jo: abstract).

Claim Rejections - 35 USC § 103

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 5, 9-10, 20, 33, 86, 113-114, 117, 127-128, 141, 229, 233, and 554-555 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jo et al ("Synchronized one-to-many media streaming with adaptive playout control", 10 December 2002), and in further view of Anjum et al (US 2003/00992121 A1).

Regarding claim 5, Jo teaches the use of a server streaming media across an IP based network to multiple clients while performing at least one type of synchrony group management operation (Jo: abstract).

Jo does not teach the use of a member device (client) operating as a master device configured to perform at least one type of synchrony group management operation.

Anjum, in a similar field of endeavor, teaches the use of a Bluetooth piconet that uses a master device to perform at least one type of synchrony group management operation (Anjum: abstract and [0007]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Anjum for using a specialized

Bluetooth network for data communication. The teachings of Anjum, when implemented in the Jo system, will allow one of ordinary skill to operate the client and server devices in a Bluetooth network. One of ordinary skill in the art would be motivated to utilize the teachings of Anjum in the Jo system in order to use short range wireless communication as a Personal Area Network on an unlicensed radio band in a small setting.

Regarding claim 9, the Jo/Anjum system teaches comprising at least one additional device in which the master device is configured to enable the at least one addition device to join the synchrony group as a slave device (Anjum: [0004]-[0006] specifies slaves joining, See also Figure 1).

Regarding claim 10, the Jo/Anjum system teaches in which the task source device is configured to distribute tasks to the member devices using a selected multi-cast transmission methodology (Jo: abstract).

Regarding claim 20, the Jo/Anjum system teaches in which the master device is configured to enable the task source device to migrate from one device (slave of first piconet) to another device (master of second piconet) in the system (Anjum: abstract specifies that a second piconet can be created with a new master acting as a task source to distribute information to second piconet).

Regarding claim 33, the Jo/Anjum system teaches in which at least one other device operates as a task source device configured to distribute tasks to a second synchrony group (Anjum: abstract specifies that a second piconet may be created with a new master acting as a task source to manage slaves).

Regarding claim 86, the Jo/Anjum system teaches further including:

a migration information receiving module configured to receive migration information from the task source device (Anjum: [0009] specifies migration receiving necessary by a slave);

a migration control module configured to distribute the series of tasks to a synchrony group (Jo: abstract specifies distributing the media).

Regarding claim 113, this method claim comprises limitation substantially found within claim 5 and the same rationale of rejection is used, where applicable.

Regarding claim 114, the Jo/Anjum system teaches further comprising the step of controlling a master device's distribution of status information (Anjum: abstract).

Regarding claim 117, this method claim comprises limitation found within claim 9 and the same rationale of rejection is used, where applicable.

Regarding claim 127, this method claim comprises limitation found within claim 20 and the same rationale of rejection is used, where applicable.

Regarding claim 128, this method claim comprises limitation found within claim 20 and the same rationale of rejection is used, where applicable.

Regarding claim 141, this method claim comprises limitation found within claim 33 and the same rationale of rejection is used, where applicable.

Regarding claim 229, the Jo/Anjum system teaches in which in response to control information to enable another device to become a member of a device's synchrony group, the control module enables to transmit a command to the other device to enable the other device to become a member of the device's synchrony group (Anjum: [0009]).

Regarding claim 233, the Jo/Anjum system teaches in which the interface module is further configured to enable the computer to transmit the tasks to at least one other device. (Anjum: [0010], Jo: abstract)

Regarding claim 554, the Jo/Anjum system teaches wherein the device operating as the task source for the first synchrony group (master of second/helper piconet), is also operating as a member device of a second synchrony group (first piconet) (Anjum: abstract).

Regarding claim 555, the Jo/Anjum system teaches wherein the migration control module is further configured to notify the members of the synchrony group that it is to thereafter operate as the task source device (Anjum: [0025], [0032] description of step 490).

12. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jo et al ("Synchronized one-to-many media streaming with adaptive playout control", 10 December 2002), in view of Anjum et al (US 2003/00992121 A1), and in further view of Powers (US 2004/0203378 A1).

Regarding claim 19, the Jo/Anjum system teaches the use of a master device managing slaves and migrating devices. However, the Jo/Anjum system does not teach the use of a master device migrating from one device to another.

Powers, in a similar field of endeavor, teaches a slave device being promoted or swapped with the master device. (Powers: abstract)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Powers for having dynamic master devices. The teachings of Powers, when implemented in the Jo/Anjum system, will allow one of ordinary skill in the art to swap master devices with slave devices when necessary or preferred. One of ordinary skill in the art would be motivated to utilize the teachings of Powers in the Jo/Anjum system in order to

allow devices dynamically manage their master, if, for instance, the master leaves the network.

13. Claims 138, 564, 573, and 574 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jo et al ("Synchronized one-to-many media streaming with adaptive playout control", 10 December 2002), and further in view of Miyabe et al (US 2001/0032188 A1).

Regarding claim 138, Jo teaches a distribution system using a media server (Jo: abstract), but Jo never discloses where the media server obtains its media from.

Miyabe et al, in a similar field of endeavor, teaches wherein task source devices (Miyabe: Figure 1A, items 114, 123, and 173) obtain information associated with the tasks from at least two types of information sources. (Miyabe: Figure 1A, item 123 depicts two incoming information sources, one from item 121 and one from 131)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Miyabe for having multiple different information sources. The teachings of Miyabe, when implemented in the Jo system, will allow one of ordinary skill in the art to obtain media information from multiple outlets. One of ordinary skill in the art would be motivated to utilize the teachings of Miyabe in the Jo system in order for to allow the system to support a user who has multiple media source devices.

Regarding claim 564, the Jo/Miyabe system teaches wherein the at least one task distribution device is further configured to obtain information associated with the tasks from at least one information source (Miyabe: Figure 1A, items 123, 121, and 131).

Regarding claim 573, the Jo/Miyabe system teaches wherein the at least one information source is an Internet broadcast (Miyabe: [0129]).

Regarding claim 574, the Jo/Miyabe system teaches wherein the at least one information source is a satellite broadcast (Miyabe: Figure 1A, item 111 to item 112 to item 113 to item 114).

14. Claims 6, 551, and 556 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jo et al ("Synchronized one-to-many media streaming with adaptive playout control", 10 December 2002) and Anjum et al (US 2003/00992121 A1), and further in view of Tsuk et al (US 7,312,785 B2).

Regarding claim 6, the Jo/Anjum system teaches wherein the system contains a master device, however, their system does not teach a user interface on the device.

Tsuk, in a similar field of endeavor, teaches the system further including a user interface module configured to control the master device. (Tsuk: abstract, Figure 7B)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Tsuk for iPods with user interfaces. The teachings of Tsuk, when implemented in the Jo/Anjum system, will allow one of ordinary skill in the art to use an iPod as any one of the devices in the system. One of ordinary skill in the art would be motivated to utilize the teachings of Tsuk in the Jo/Anjum system in order to provide the user with easy interaction interfaces to control the system.

Regarding claim 551, the Jo/Anjum/Tsuk system teaches wherein the master device is further configured to provide status information related to the status of the synchrony group to the user interface module (Tsuk: col 3, lines 35-54).

Regarding claim 556, this method claim comprises limitations contained within that of claim 551 and the same rationale of rejection is used, where applicable.

15. Claim 552 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jo et al ("Synchronized one-to-many media streaming with adaptive playout control", 10 December 2002), in view of Anjum et al (US 2003/00992121 A1), and in further view of Lo et al (US 6,031,818).

Regarding claim 552, the Jo/Anjum system teaches wherein the system retransmits data in a multicast fashion, and not selective unicast.

Lo, in a similar field of endeavor, teaches the system wherein the task source device is enabled to transmit at least one previously distributed task to the slave device using a selected unicast transmission methodology (Lo: col 8, lines 14-54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Lo for using selective unicast retransmission. The teachings of Lo, when implemented in the Jo/Anjum system, will allow one of ordinary skill in the art to retransmit lost packets to member devices with unicast methodology. One of ordinary skill in the art would be motivated to utilize the teachings of Lo in the Jo/Anjum system in order to conserve bandwidth and reduce traffic.

16. Claims 549 and 550 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jo et al ("Synchronized one-to-many media streaming with adaptive playout control", 10 December 2002), and in further view of Flood (US 7,007,106 B1).

Regarding claim 549, Jo teaches obtaining from the task source device an indication of a presentation time stamp and when to execute a task. Jo does not teach wherein the member device obtains the current time value of the task source device's clock on a periodic basis.

Flood, in a similar field of endeavor, teaches wherein the member device periodically obtains the task source device's clock information (Flood: col 18, lines 22-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Flood for distributing the current time information on a periodic basis. The teachings of Flood, when implemented in the Jo system, will allow one of ordinary skill in the art to ensure the member devices were always aware of the task source device's current time information by updating on regular intervals. One of ordinary skill in the art would be motivated to utilize the teachings of Flood in the Jo system in order to update member devices of the task source's current time, which would ensure tighter synchronization.

Regarding claim 550, the Jo/Flood system teaches wherein each member device is further configured to determine, from the time stamp associated with each respective task and a time differential value representing the difference between the current time value indicated by the task source device's clock, and a current time value indicated by its respective clock, a time, relative to its respective clock, at which it is to execute the task (Flood: col 10, lines 50-63 specify calculating the offset between master and slave time and then processing the task based on a received time stamp and using this computed offset).

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY NICKERSON whose telephone number is (571)270-3631. The examiner can normally be reached on M-Th, 8:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. N./
Jeffrey Nickerson
Examiner, Art Unit 2142

/Andrew Caldwell/
Supervisory Patent Examiner, Art Unit 2142